

[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2017-0626; Product Identifier 2016-NM-210-AD; Amendment 39-

19226; AD 2018-06-06]

**RIN 2120-AA64** 

Airworthiness Directives; Bombardier, Inc., Airplanes

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc., Model CL-600-2B16 (CL-604 Variant) airplanes. This AD was prompted by reports of in-flight uncommanded rudder movements on airplanes with an installation similar to the installation on certain Model CL-600-2B16 (CL-604 Variant) airplanes. This AD requires modification of the wiring harness for the yaw damper control system. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact

Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada;

Widebody Customer Response Center North America toll-free telephone 1-866-538-1247

or direct-dial telephone 1-514-855-2999; fax 514-855-7401; email

ac.yul@aero.bombardier.com; Internet http://www.bombardier.com. You may view this

referenced service information at the FAA, Transport Standards Branch, 2200 South

216th St., Des Moines, WA. For information on the availability of this material at the

FAA, call 206-231-3195. It is also available on the Internet at http://www.regulations.gov

by searching for and locating Docket No. FAA-2017-0626.

# **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0626; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Cesar Gomez, Aerospace Engineer, Airframe and Mechanical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7318; fax 516-794-5531.

## SUPPLEMENTARY INFORMATION:

#### Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc., Model CL-600-2B16 (CL-604 Variant) airplanes. The NPRM published in the <u>Federal Register</u> on June 27, 2017 (82 FR 29014) ("the NPRM"). The NPRM was prompted by reports of in-flight uncommanded rudder movements on airplanes with an installation similar to the installation on certain Model CL-600-2B16 (CL-604 Variant) airplanes. The NPRM proposed to require modification of the wiring for the yaw damper control system. We are issuing this AD to prevent in-flight uncommanded rudder movements, which could lead to structural failure and subsequent loss of the airplane.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2016-38, effective December 12, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for certain Bombardier, Inc., Model CL-600-2B16 (CL-604 Variant) airplanes. The MCAI states:

The [Canadian] AD CF-2013-22 [which corresponds to FAA AD 2014-16-06, Amendment 39-17930 (79 FR 48972, August 19, 2014)] was issued on 12 August 2013 to mandate the introduction of an emergency procedure to the Aeroplane Flight Manual to address the uncommanded rudder movement.

Since the original issue of [Canadian] AD CF-2013-22, Bombardier Aerospace has developed a wiring modification for the yaw damper control system to prevent uncommanded movement of the rudder.

This [Canadian] AD mandates the incorporation of Service Bulletins (SB) 604-22-007 and 605-22-002 \* \* \* \*.

This AD requires modification of the wiring for the yaw damper control system. You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0626.

## **Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the NPRM and the FAA's response to that comment.

# Request to Clarify Airplane Model that Experienced In-flight Uncommanded Rudder Movement

Bombardier, Inc., requested that the Reason section (paragraph (e) of the proposed AD) be revised to clarify that the in-flight uncommanded rudder movements occurred on airplanes with an installation similar to the installation on certain Model CL-600-2B16 airplanes and did not occur on Model CL-600-2B16 airplanes. Bombardier, Inc., stated that it is not aware of any in-flight uncommanded rudder movements that were experienced by operators of Model CL-600-2B16 airplanes, but as written, the Reason section of the NPRM implied that these events occurred on Model CL-600-2B16 airplanes.

For the reason provided by the commenter, we agree to revise the SUMMARY and Discussion sections of this final rule and paragraph (e) of this AD to clarify that the in-flight uncommanded rudder movements occurred on airplanes with an installation similar to the installation on certain Model CL-600-2B16 airplanes. We have issued AD 2013-14-11, Amendment 39-17516 (78 FR 44871, July 25, 2013) to address the same unsafe condition for Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes,

Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes, Model CL-600-2D15 (Regional Jet Series 705) airplanes, and Model CL-600-2D24 (Regional Jet Series 900) airplanes.

#### Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

## Related Service Information under 1 CFR part 51

Bombardier, Inc., issued Service Bulletin 604-22-007, Revision 01, dated July 25, 2016; and Service Bulletin 605-22-002, Revision 01, dated July 25, 2016. This service information describes procedures for modifying the wiring harness for the yaw damper control system. These documents are distinct since they apply to different airplane configurations. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

# **Costs of Compliance**

We estimate that this AD affects 120 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

#### **Estimated costs**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Modification	50 work-hours X \$85 per hour = \$4,250	Up to \$478	Up to \$4,728	Up to \$567,360

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

# **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
  - 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

# List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

# **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

# § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2018-06-06 Bombardier, Inc.:** Amendment 39-19226; Docket No. FAA-2017-0626; Product Identifier 2016-NM-210-AD.

#### (a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

# (b) Affected ADs

None.

# (c) Applicability

This AD applies to Bombardier, Inc., Model CL-600-2B16 (CL-604 Variant) airplanes, certificated in any category, serial numbers (S/Ns) 5301 through 5665 inclusive, 5701 through 5911 inclusive, 5913, and 5914.

# (d) Subject

Air Transport Association (ATA) of America Code 22, Autopilot System.

## (e) Reason

This AD was prompted by reports of in-flight uncommanded rudder movements on airplanes with an installation similar to the installation on certain Model CL-600-2B16 (CL-604 Variant) airplanes. We are issuing this AD to prevent in-flight uncommanded rudder movements, which could lead to structural failure and subsequent loss of the airplane.

# (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

# (g) Modification

Within 48 months after the effective date of this AD: Modify the wiring harness for the yaw damper control system, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraphs (g)(1) and (g)(2) of this AD.

- (1) For airplanes having serial numbers (S/Ns) 5301 through 5665 inclusive: Bombardier Service Bulletin 604-22-007, Revision 01, dated July 25, 2016.
- (2) For airplanes having S/Ns 5701 through 5911 inclusive, 5913, and 5914: Bombardier Service Bulletin 605-22-002, Revision 01, dated July 25, 2016.

# (h) Part Installation Limitation

As of the effective date of this AD, no person may install on any airplane a yaw damper actuator having part number 622-9968-002, unless the modification required by paragraph (g) of this AD has been accomplished.

## (i) Credit for Previous Actions

This paragraph provides credit for the modification required by paragraph (g) of this AD, if the modification was performed before the effective date of this AD using the applicable service information identified in paragraph (i)(1) or (i)(2) of this AD.

- (1) Bombardier Service Bulletin 604-22-007, dated June 23, 2015.
- (2) Bombardier Service Bulletin 605-22-002, dated June 23, 2015.

# (j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

## (k) Related Information

- (1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2016-38, effective December 12, 2016, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0626.
- (2) For more information about this AD, contact Cesar Gomez, Aerospace Engineer, Airframe and Mechanical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7318; fax 516-794-5531.
- (3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (l)(3) and (l)(4) of this AD.

# (l) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier, Inc., Service Bulletin 604-22-007, Revision 01, dated July 25, 2016.

(ii) Bombardier, Inc., Service Bulletin 605-22-002, Revision 01, dated July 25,

2016.

(3) For service information identified in this AD, contact Bombardier, Inc., 400

Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer

Response Center North America toll-free telephone 1-866-538-1247 or direct-dial

telephone 1-514-855-2999; fax 514-855-7401; email ac.yul@aero.bombardier.com;

Internet http://www.bombardier.com.

(4) You may view this service information at the FAA, Transport Standards

Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of

this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the

National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Des Moines, Washington, on March 6, 2018.

Michael Kaszycki,

Acting Director,

System Oversight Division,

Aircraft Certification Service.

[FR Doc. 2018-05021 Filed: 3/14/2018 8:45 am; Publication Date: 3/15/2018]

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